The Air Force Acquisition Reform Newsletter

AEROSPACE ACQUISITION 2000

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Volume 3, Number 6

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Leading and Embracing Change—A New Millennium!

Creating a Knowledge-Based Organization

To meet the demands of the 21st century, organizations, especially those within the Department of Defense, are challenged to transform themselves into Knowledge-Based Organizations (KBOs) through the implementation of Knowledge Management methodologies, processes, tools, and techniques.

What Characterizes a Knowledge-Based Organization?

- An environment that encourages organizational members to commit to the process of knowledge creation, sharing, and collaboration;
- Organizational knowledge that is recognized as a perishable asset that must be managed effectively and efficiently (i.e., identification, capture, storage, and utilization of knowledge); and
- Organizational knowledge that helps achieve such visible operational results, such as quality improvement, customer satisfaction, cycle-time reduction, or cost control.

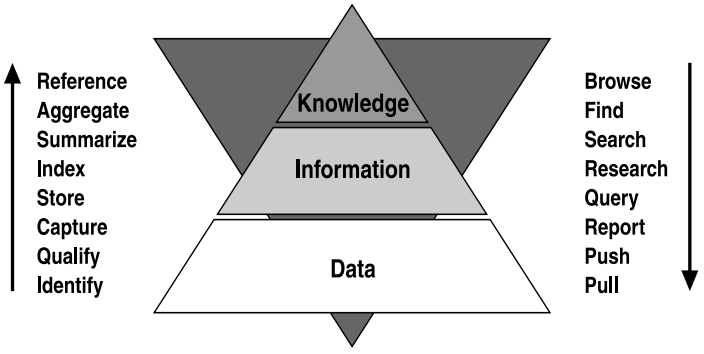
What Is Knowledge?

An organization's **knowledge assets** comprise its knowledge base. Those assets include:

1) **explicit knowledge** resident in organizational documents, databases, business processes, policies and procedures, programs and projects, and

2) **tacit knowledge** resident in the experience and expertise of the organization's employees.

Relationship of Data, Information, and Knowledge



The key to understanding the organization's knowledge needs lies in the relationships between organizational knowledge, information, and data.

What Is Knowledge Management?

Currently, Knowledge Management has as many definitions as experts who think they have the one "right" definition. As Knowledge Management continues to emerge as a discipline, it can be defined as a strategy for getting the right knowledge to the right people at the right time while helping them share and collaborate that knowledge to improve organizational performance and individual productivity. Simply stated, it is an integrated approach to creating, identifying, capturing, organizing, sharing, and adapting organizational knowledge assets – both explicit and tacit.

What Are the Objectives of Knowledge Management?

Knowledge Management can help any organization:

- Adapt its existing culture to facilitate the behaviors of knowledge sharing and collaboration
- Capture, index, and store explicit knowledge by applying appropriate enabling technologies
- Transform tacit knowledge into explicit knowledge
- Improve business processes through broader access to and application of the organizational knowledge base
- Create opportunities for innovation and improvements in quality, communication, and productivity

How Does Knowledge Management Enable Change?

Knowledge Management is a key enabler for organizational change. Knowledge Management initiatives can incrementally improve many aspects of an organization's business environment and can help increase employee productivity.

(Continued on page 6)

Front Cover: An EC-130E of the 42nd Airborn Command & Control Squadron, flies over Lake Mead, AZ. DoD photo by TSgt Lance Cheung, USAF.

What's News?

Executive Order to Increase Opportunities for Women-Owned Small Businesses

On May 23, 2000, President William J. Clinton issued an executive order that will increase opportunities for women-owned small businesses (WOSBs). The order requires all federal departments and agencies to develop a comprehensive strategy to expand opportunities for WOSBs. Where feasible, all federal departments and agencies must establish goals to achieve a participation rate for WOSBs of at least five percent of the total value of all prime contract awards for each fiscal year and at least five percent of the total value of all subcontract awards for each fiscal year.

The executive order can be read in its entirety at ***http://www.arnet.gov/Library/OFPP/PolicyDocs/exeorde5232000.html.***

Selected Acquisition Reports

On August 18th, 2000, DoD released details on the major defense acquisition progam cost and schedule changes that occurred since the December 1999 report. This information is based on the Selected Acquisition Reports (SARs) submitted to Congress for the June 30, 2000 reporting period. SARs summarize the latest estimates of cost, schedule, and technical status.

To read the Selected Acquisition Reports, visit ***http://www.defenselink.mil/news/Aug2000/b08182000_bt512-00.html.html.***

Best Practices Guide for Collection and Use of Contractor Performance Information

In May 2000, the Office of Federal Procurement Policy, the Office of Management and Budget, and the Executive Office of the President published "Best Practices for Collecting and Using Current and Past Performance Information." The guide contains techniques and best practices for recording contractor performance information, assessing it, and using it to improve the source selection process.

The guide can be read in its entirety at ***http://www.arnet.gov/Library/OFPP/BestPractices/pastpeformguide.html.***

DoD 5000 Acquisition Policy

The draft acquisition policy DoDD 5000 series is in final draft coordination. The directive and its associated instruction and regulation (DoDI 5000.2 and DoDI5000.2-R) provide mandatory policies and procedures for the management of acquisition programs.

These draft documents are available for information purposes only. To read them, visit ***http://www.deskbook.osd.mil/*** and select *"Draft DoD 5000 Acquisition Policy Documents."*

Next Issue:

The November/December 2000 issue will highlight the Acquisition 2005 Task Force, HAF 2002, the Challenges of Program Instability, Self-Organization, and previously untold Success Stories.

Into the Future of Defense Reform: the Mission and the Challenge

The Under Secretary of Defense, Acquisition, Technology and Logistics (USD AT&L) will host a live satellite training broadcast on October 4, 2000. Secretary of Defense, William S. Cohen, and Deputy Secretary of Defense Rudy de Leon, will lead the discussion on where DoD has been with Defense Reform Initiatives and where it intends to go.

Details will be available at ***http://www.govevents.com/broadcasts/Oct_broadcast/info.htm.***

Commercial Item Acquisition

On June 26, 2000, DoD released "Commercial Item Acquisition: Considerations and Lessons Learned." This document provides guidance on the use of commercial items for program managers, describes the fundamental challenges that organizations face when they integrate commercial items, and addresses issues concerning purchasing from the commercial marketplace. The report summarizes lessons learned and offers suggestions for successful commercial item acquisition.

To read the report in its entirety, visit ***http://www.acq.osd.mil/ar/*** and select *"New COTS & Comm. Item Guide."*

Modernizing the FPDS

Federal Agency leaders are currently conducting a "Revolution in Business Affairs" in an effort to exploit technology advancements and adopt new operational and business processes. The goal is an infrastructure that is lean, agile, and more effective at supporting internal and external customers. The Federal Procurement Data System (FPDS), established by Public Law 93-400 (1974) for collecting, developing, and disseminating procurement data, was identified as a key opportunity for such an innovation.

The FPDS contains statistical data about U.S. Government Executive Branch procurement contract transactions awarded since October 1, 1978. The FPDS summarizes procurement contract obligations amounting to approximately $200 billion in goods and services bought by approximately 70 Executive Branch agencies. It contains details that include who bought what, from whom, and where. The FPDS data is the official government source on contract information and is utilized by the White House, Congress, Government Agencies, and the Public.

There are many reasons why the 20-year-old FPDS needs to change. Specific problems include a lack of real time data, a lack of relevant procurement activity data, outdated data elements, a complex data architecture, and confusing terminology. To overcome these problems, additional systems, created by individual agencies, have lead to data inaccuracy and additional costs. Legislative changes now require the collection of performance measurements, workforce management, and other data on a variety of procurement issues. As a result, new systems must not only support data collections but also serve as a management information tool. Providing each agency with relevant and reliable information will improve decision making and provide insights necessary to judge the efficiency and effectiveness of programs.

To expedite the transformation of the FPDS, senior leadership from the Office of Federal Procurement Policy (OFPP), the Department of Defense (DoD), & General Services Administration (GSA) decided to engage the on-going Change Management Center (CMC), under the leadership of the Deputy Under Secretary of Defense (Acquisition Reform), to execute the FPDS reform. In addition, a "Rapid Improvement Team" (RIT) was chartered to bring together diverse stakeholders to identify high-payoff opportunities and to provide resources to accelerate the identification and implementation of process and performance improvements. The RIT, which has met several times since February, has agreed on the need to change the FPDS. To date they have defined changes to the business environment that might drive data needs, benchmarked existing systems, and defined informational, operational, and functional needs.

The vision for FPDS's successor, the Federal Acquisition Management Information System (FAMIS), contains many new capabilities: 54 new requirements for functional needs and 52 new requirements for information needs. With the new system, data collection will be driven by, and integrated with, the business process and aligned with the regulatory process. Contracting officers and small businesses will have easy access to day-to-day data to support acquisition planning, market research, and other business needs. In addition, FAMIS will eliminate the need for agency feeder systems, be flexible enough to quickly change as business process changes drive new data collection needs, and ensure that legacy data can be included in statistical analysis. Once engineered, FAMIS will bring about many beneficial changes including more timely and accurate information, an understanding of how changes to the business process affect socioeconomic programs, the elimination of data rework, a reduced cost to agencies, improved business decision making, and a better understanding by the public of how the government is spending their dollars.

The Procurement Executives Council (PEC), the principle forum for agency procurement executives, has taken a leadership role in modernizing the FPDS. Approximately 50 participants attended an industry forum on July 10, 2000 to discuss the Government's informational and operational needs. Their goal was to seek information from industry on how to best create a system to meet its requirements. Possibilities include public/private partnerships, the acquisition of services instead of equipment, and the acquisition of a commercial or customized system. Subsequent to the forum, industry was given the opportunity to submit suggestions and feedback via the Internet.

Next steps include developing a business case based on the RIT efforts and industry feedback, presenting it to the steering committee and PEC for approval, and developing a project structure and funding strategy to proceed with FAMIS. The current FPDS can be found at ***http://www.fpds.gsa.gov/.***

Hill AFB Utilizes "Just In Time" Inventories

by Steven R. Ford
Reprinted with permission of Hilltop Times

There's an old saying in logistics: "The right part at the right time at the right place." The Landing Gear shop has found that it can satisfy that requirement by ordering its bushings "Just In Time" (JIT).

Having always had what Maj C.A. Allen, LIL Deputy Chief, calls a "shelf mentality" ordering and stocking an inventory of parts–the Landing Gear shop personnel have recently adjusted to the implementation of a new system based on Japanese "Just In Time" inventory management.

In the mid-80s, Japanese manufacturers pioneered a system of inventory management that created substantial efficiency from frequent deliveries of small quantities of parts, meeting an immediate demand. This reduced the high cost of carrying an inventory and freed both capital and floor space.

Previously, landing gear personnel would measure the size of the hole for which they needed bushings, order a bushing in a standard size, and machine the part to fit the hole. By ordering the bushings to exact measurements and specifications, and only as needed, the shop has reduced its inventory and removed the machining labor from the loop.

While on a trip to Florida, a Landing Gear Process Improvement Team saw that B.F. Goodrich was able to order bushings to exactly fit its holes. The team noted that B.F. Goodrich's delivery time was just 24 hours.

"We said, 'hey, we've been talking about this for almost a year now, and these guys are doing it,'" said Todd Palmer, a Landing Gear shop consulting engineer from Dynamic Research Corporation. "It is real. It is possible, so let's do it in our shop."

Palmer tackled the effort and soon JIT bushings were being ordered electronically over the Internet to fit the holes precisely. He notes that there has been steady growth from the inception of the program.

In June 1999, the shop received 200 JIT bushings per month. The shop is now receiving as many as 1,200 per month, six times the original quantity. Delivery, according to Palmer, has been excellent, consistently arriving within 48 hours.

"It gives us a chance to focus on the actual parts," said MSgt. Kenneth Pires, deputy chief of Metals Processing, "and it smoothes our production processes as far as moving the parts out and getting them out to the assembly line."

"We can move the parts quicker because we're not spending as much time on one particular item. We're measuring an item, it moves along, we'll measure another, and when the bushings come in, we'll install them in that particular item. This way, we're able to push more parts through the system."

According to Pires, there is still some work to be done implementing the system. The shop needs to create a station for measuring the parts for bushings. Once in place, Pires said that throughput of parts and landing gear as a whole will again increase.

"You don't see this many parts going through one system," Pires said. "You definitely don't see it in the field. Our volume of parts makes it harder to install the process, but we'll probably reap the most benefits as we speed up our line of parts through here."

Pires also noted that the Landing Gear bushings are not entirely JIT. Of the 700 or so different bushings ordered by the shop, right now 500 are JIT. He said the shop is shooting for an August or September timeframe for complete implementation of JIT for all bushings.

Dr. Gansler Addresses "Partnerships in R&D"

On July 11, 2000, in Washington D.C., an Excellence in Government Panel was held to address the need for successful industry and government partnerships in the Research & Development (R&D) environment. At this event, the Honorable Jacques S. Gansler, Under Secretary of Defense (AT&L), spoke about the critical role that these partnerships play in meeting the requirements of the "technology-driven changing nature of warfare."

To maintain America's "technological superiority," the military must continue to stay "two steps ahead" of the rest of the world. In order to achieve this, the military must shorten cycle times, the time from idea to deployment, foster and

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Knowledge Management

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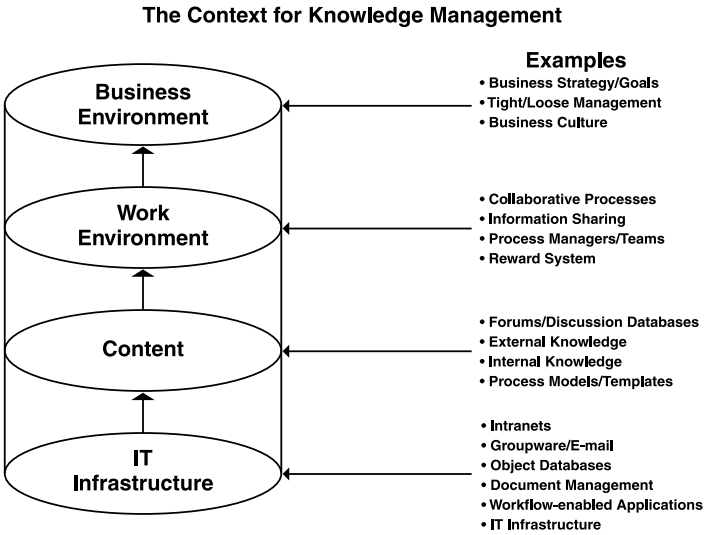
What Is the Context for Knowledge Management?

Knowledge Management helps to integrate existing and future business and IT resources.



Want to know more?

To gain more insight into Knowledge Management and its importance to your organization, read:

"Working Knowledge" by Tom Davenport and Larry Prusak
"Management Challenges for the 21st Century" by Peter Drucker
"If Only We Knew What We Know" by Carla O'Dell and C. Jackson Grayson Klien, D.A.
Strategic Management of Intellectual Capital. Butterworth-Heinemann. Woburn, MA. 1997. Myers, Paul.
Knowledge Management and Organizational Design. Butterworth-Heinemann. Woburn, MA. 1996. Prusak, Lawrence.
Knowledge in Organizations. Butterworth-Heinemann. Woburn, MA. 1997.
"The Knowledge Organization" by Karl-Erik Sveiby

The following web sites provide a plethora of useful information on knowledge management:

www.brint.com	www.gartner.com
www.bus.utexas.edu/kman	www.kmworld.com
www.entovation.com	www.delphigroup.com
www.knowledge-nurture.com	www.cio.com
www.afkm.wpafb.af.mil	www.cio.gov

AFMC's Acquisition Support Teams

By Mr. Dave Franke, Chief, Centralized Support Team, HQ AFMC/AQ

Armed with the vision "Leading business practice innovation," AFMC's Acquisition Support Teams (ASTs) are responsible for institutionalizing acquisition reform throughout the Air Force. The ASTs are multidisciplined teams located at each center that are dedicated to providing direct program support. With a presence at all AFMC centers, the ASTs are able to apply acquisition reform throughout a program's entire lifecycle to include R&D, testing, production, sustainment, and disposal.

The ASTs' range of involvement with their programs has increased recently to include support for both pre- and post-contract awards. With their proven workshops, training modules, and expertise, the ASTs assist integrated product teams in the development of acquisition strategies appropriate for its programs. Its objectives are to assist the program teams in working smarter and to ensure that quality solicitations are developed. These objectives should result in the receipt of proposals that are more responsive to the programs' needs.

The AST Summits, held quarterly, are a means for everyone to share information and collectively improve the acquisition processes. Summit XVIII is scheduled for late September 2000. The Director of the Centralized Acquisition Support Team, Mr. Dave Franke, is the Summit Chairperson. In this capacity, he leads the group as it formulates an overarching vision and implements acquisition reform throughout the Air Force. As a member of program advisory/review committees including the Acquisition Strategy Panels, Source Selection Advisory Committees, and PEO/DAC Portfolio Reviews, he provides the vital link between acquisition reform objectives and program outcomes.

Summit participants include Air Force representatives from the ASTs, SAF/AQX, SAF/AQC, and Industry representatives from the Association of Proposal Management Professionals and the National Defense Industrial Association (Procurement Committee). As an information-sharing forum, the Summits provide opportunities to identify and resolve issues/needs/concerns, shape new initiatives in their formative stages, and collaboratively develop training materials. The participants take turns hosting the Summits. In turn, each center has the opportunity to demonstrate its new capabilities, initiatives, and processes.

Gansler's Address

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Honorable Jacques. S. Gansler
Under Secretary of Defense (AT&L)

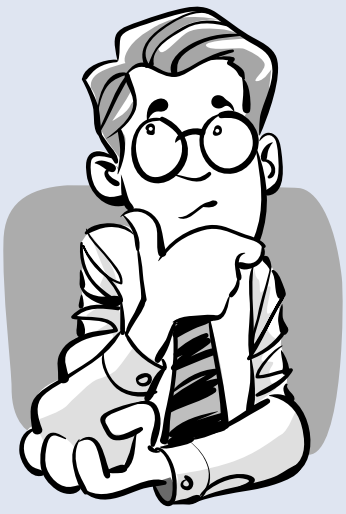
reward innovation, and improve interoperability. "Government and industry R&D prepare us for that tomorrow." Current R&D efforts are focused on three critical technologies: information, materials, and biological. What the military hopes to achieve is an "evolutionary, but rapid, acquisition policy that matches technological evolution and a process that gets the best technology available to the warfighter, not only faster, but also with the ability to upgrade that technology as it evolves."

The DoD is making significant progress in achieving these goals. Advanced Concept Technology Demonstrations (ACTDs) are utilizing non-traditional acquisition methods to bring new, innovative technology into the field in a few years (versus the 10-15 years without the use of ACTDs). Another initiative underway is the establishment of a limited amount of funds put aside to allow the quick development and deployment of emerging technologies. In addition, using components from the commercial marketplace or commercial-off-the-shelf products (COTS) has become an "everyday" effort in the R&D community. This gives the DoD access to evolving commercial technologies quickly, efficiently, and affordably. Finally, to take full advantage of commercial best practices, the DoD is working greatly to reduce and streamline its "burdensome regulatory regime."

DoD sponsorship is critical in supporting R&D partnerships at universities and small businesses. As Gansler explained, "On the university side, DoD sponsors 71% of all federal funding in electrical engineering R&D performed at institutions of higher learning, 63% of mechanical engineering R&D, 42% of aeronautical engineering, and 42% of all computer science R&D at universities. Increasingly, these university efforts are becoming partnerships between government, industry, and the universities." On the small business side, two thousand research contracts were awarded in FY99 as part of the Small Business Innovative Research (SBIR) program. Both the R&D performed by small businesses and their ability to quickly adapt it to the defense world are what keeps the DoD on the "cutting edge."

In conclusion, Gansler notes that "a strong R&D program continues to be the critical element in maintaining our national security posture of technological superiority in the 21st century." He states that the key to this lies in the area of government/industry partnerships and their ability to rapidly deploy them.

Dr. Gansler's speech can be read in its entirety at ***http://www.acq.osd.mil/ousda/speech/r&d.html.***



Trivia Corner

To test your knowledge of military trivia, two trivia questions will appear in each edition of *Aerospace Acquisition 2000 (AA2000)*. One question will be published in the printed newsletter; the other will be posted on the *AA2000* newsletter web site at ***www.safaq.hq.af.mil/acq_ref/news/***.

Please send all responses by e-mail to ***arnews@pentagon.af.mil***. When more than one correct response is received, the winner will be determined by the date and time on the response.

Winners will be announced in the following edition of *AA2000*. Each winner's name will go into a drawing to be held at the end of the calendar year for the grand prize—a $50.00 gift certificate to Blockbuster Video. Good luck to everyone!

Last Issue: **Answer—Hat in the Ring**
Winner—Capt Ron Jobo, Exec Officer, AFPEO for Fighter/Bomber Programs

Question : Who said "Modern air power has made the battlefield irrelevant"?

Get Published

Aerospace Acquisition 2000 is a bimonthly newsletter published by the Office of the Assistant Secretary of the Air Force (Acquisition). The purpose of the newsletter is to disseminate information pertinent to the professional development of the Air Force Acquisition and Logistics Workforce.

Subject matter may include, but is not limited to, professional development, acquisition reform, acquisition and logistics program accomplishments, technology developments, and policy guidance.

Articles must be no more than 3 double-spaced, typed pages. Photos may be black and white or color. Please submit illustrations in separate files from text. Photos and illustrations will not be returned unless requested. All scanned photos and illustrations must have a resolution of at least 300 dpi, or prints of all photos may be submitted via U.S. Mail, FedEx, etc.

All articles must be cleared by the author's security/OPSEC office and public affairs office prior to submission. The cover letter accompanying the article must state that these clearances have been obtained and that the article has command approval for open publication. Offices and individuals submitting articles that report Air Force savings must be prepared to quickly provide detailed documentation upon request that verifies cost savings. Authors are requested to include a short biographical sketch.

Submission dates:

Issue	Author's Deadline
January/February	10 October
March/April	10 December
May/June	10 February
July/August	10 April
September/October	10 June
November/December	10 August

To submit an article, please provide manuscripts (MS Word), illustrations (EPS or 300 dpi TIFF or JPEG scans), and photos (glossy prints or 300 dpi TIFF or JPEG) via e-mail at ***arnews@pentagon.af.mil*** or on a 3 ½ inch floppy disk or a 100-MB ZIP disk via U.S. mail to SAF/AQXA, 1060 Air Force Pentagon, Washington, DC 20330-1060. All submissions must include the author's mailing address and office phone number (DSN and commercial).

Aerospace Acquisition 2000 reserves the right to edit for publication style and clarity.

SAF/AQXA
1060 Air Force Pentagon
Washington, DC 20330-1060